

A NEW SCELIONID PARASITE OF LOCUST EGGS FROM THE NORTHERN TERRITORY OF AUSTRALIA.*

BY A. A. GIRAULT.

THE following species was received from Mr. G. F. Hill, Government Entomologist, Northern Territory, Australia.

Genus *SCELIO*, Latreille.

1. *Scelio semisanguineus*, n. sp.

Female.—Length 3.20 mm.

Blood red, the head, abdomen and distal six joints of antennal flagellum, black; joints 5 and 6 of antennæ suffused with blackish; segments 2-5 of abdomen suffused more or less with reddish, ventrad and dorsad. Distal half of fore wings rather deeply infuscated. Scape long, about equal to the next six joints; pedicel somewhat longer than joint 3 which is somewhat longer than wide at apex; following joints wider than long, 7 longest of them, 5 and 6 shortest. Mandibles very long, strongly bidentate at apex, the teeth subequal; maxillary palpi 3-jointed. Venation faint. Segment 4 of abdomen distinctly longer than the two preceding segments; segments 2 and 3 of abdomen with longitudinal striæ more or less anastomosed; segments 4 and 5 densely polygonally reticulated, the lines raised; 6 striated like 3, also the entire venter; segment 5 with the striation along distal half. Thorax umbilicately punctate, the punctures unequal in size, smallest on propodeum; the latter also obliquely longitudinally striate but not densely, two of the striæ down the meson as median carinæ which are separated for some distance. Lateral margin of propodeum and the shoulders fringed with silvery pubescence. Parapsidal furrows complete, rather distinct. Head coarsely punctate and with short silvery pubescence.

Male.—Unknown.

Described from five females labelled "No. 31, Botanic Gardens, Darwin, N. T., Feb. 13, 1914, G. F. Hill," and captured over acridid egg-beds on sandy soil.

Habitat.—Australia: Port Darwin, Northern Territory. Associated with Acridiidae.

Types.—Queensland Museum, Brisbane, five females on a tag.

NEW AUSTRALIAN BEES.

BY T. D. A. COCKERELL.

Euryglossidia purpurascens, sp. n.

♂. Length about $8\frac{1}{2}$ mm.; black, the abdomen dark rich chestnut-red, suffused with purple, the basal segment dark; antennæ black, extremely long, reaching to third abdominal segment; head

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broad; mandibles black; clypeus shining, with sparse distinct punctures; supraclypeal area dullish, appearing minutely granular, contrasting with clypeus; hair of head and thorax mainly white, but there is fuscous or black hair on clypeus, vertex, and discs of mesothorax and scutellum; mesothorax dull, without evident punctures; scutellum a little more shining, slightly bigibbous; area of metathorax large, with only microscopical sculpture; tegulae piceous, with a large testaceous spot posteriorly; wings strongly infuscated, brownish; the large stigma dark reddish; nervures fuscous; b. n. falling far short of t. m.; lower side of first s. m. with a gentle double curve; first r. n. joining second s. m. at a distance from base equal to length of first t. c.; legs black basally, red apically, the black ending on femora, near middle on anterior ones, near apex behind, but at middle or before in front, on the other ones; middle and hind tibiae with a dusky suffusion on outer side; abdomen broad basally, not clavate, not punctured; apical plate circular, its margin broadly translucent.

♀. Length about 9 mm., much like the male, but antennae short, ordinary; supraclypeal area elevated, smooth and shining; sides of second abdominal segment with a large dark spot; apical fimbria dark fuscous, not very large.

Hab. Yallingup, S.-W. Australia, September 14th–October 31st, 1913, 1 male (= type), 2 females (R. E. Turner); British Museum. The three species of *Euryglossidia* now known may be separated thus:—

Wings hyaline, nervures ferruginous (W. Australia)

ichneumonoides (Ckll.).

Wings brownish 1.

1. Nervures ferruginous; second s. m. receiving first

r. n. at a distance from base equal to about half
of first t. c. (Victoria)

rectangulata, Ckll.

Nervures fuscous; second s. m. receiving first r. n.

at a distance from base equal to length of first
t. c. (W. Australia)

purpurascens, Ckll.

All three show more or less purple lustre on abdomen, at least in the male. The species now described is considerably larger than the others.

Euryglossa undulata, sp. n.

♀. Length about 10 mm.; robust, black, the head and thorax with rather scanty dull white hair, the end of the abdomen with dark fuscous hair; head broad; mandibles black, with a broad bright ferruginous subapical band; clypeus shining, with scattered distinct but not large punctures; flagellum beneath dark brown with pallid bands or spots, one to each joint; mesothorax dull, microscopically tessellate, with irregular shallow punctures, sparse on disc; scutellum more shining, with scattered large punctures, and a very fine median impressed line; area of metathorax large, shining, with only microscopical sculpture; tegulae rufopiceous; wings smoky-hyaline, nervures and stigma piceous; b. n. meeting t. m.; lower side of first

s. m. very strongly arched or undulated; legs dark reddish brown with glittering white hair; anterior knees and tibiæ in front yellow; abdomen broad, first segment with a large yellow patch (bidentate posteriorly) at base; second to fourth segments with interrupted yellow bands, which become very broad in the sublateral region; second and third segments dull basally, shining apically; apical plate small; greater part of venter yellow.

♂. Length 8 to 9 mm.; much more slender; face and front with much white hair, but not hiding the surface; flagellum beneath dark coffee-brown, not spotted; b. n. not reaching t. m.; all the femora yellow at apex; anterior tibiæ yellow with a large black patch behind; middle and hind tibiæ yellow at apex behind; first abdominal segment not yellow at base; second to fifth with transverse yellow maculæ, successively smaller, at sides, those beyond the third segment sometimes hidden by the retraction of the segments; apical plate circular, orange-fulvous; venter mainly yellow.

Hab. Yallingup, S.-W. Australia, September 14th–October 31st, 1913, 1 female (= type), 3 males (R. E. Turner); British Museum. The sexes were taken mated on September 30th. The female is superficially rather like *E. crabronica*, Ckll., but differs by the dark face, venation (first r. n. entering second s. m. some distance from base, second r. n. a short distance from apex), &c. *E. maculata*, Sm. (of which *E. villosula*, Sm., is probably the male, judging from the descriptions), has yellow legs, while *E. nitidifrons*, Sm., has yellow mandibles.

Binghamiella insularis, sp. n.

♂. Length about 7 mm.; rather slender, black; first abdominal segment black or nearly, with the apical margin broadly red; rest of abdomen bright chestnut-red, with the apical margins of the segments stained with dusky; face with white hair, not dense. Compared with female *B. antipodes* (Smith), from New South Wales, the following differences are apparent: abdomen a much brighter red; wings dusky, not so red (very red in *antipodes*), with the stigma and nervures piceous; third s.m. broader above than second (the reverse is true of *antipodes*); mesothorax extremely densely punctured. Apical plate of abdomen very small and narrow; antennæ wholly dark; flagellum very long, reaching to end of thorax; lobes of tongue quite long and slender.

Hab. Eaglehawk Neck, S.-E. Tasmania, February 12th–March 3rd, 1913 (R. E. Turner). Two males. British Museum. As we know only the male of *B. insularis* and the female of *B. antipodes*, it is difficult to determine the true specific characters of the new form, but it seems to be sufficiently distinct.

Exoneura turneri, sp. n.

♀. Length about 8 mm.; head and thorax black, wholly without light markings; abdomen bright chestnut-red, the first segment with two rather small dusky spots near base; femora, tibiæ, and tarsi bright chestnut-red, anterior femora black at extreme base;

mandibles with a very obscure reddish spot; face broad, orbits practically parallel; scape with a narrow red stripe in front; flagellum dark; tegulae piceous; wings strongly reddened; mesothorax very smooth, polished; hair of hind tibiae and tarsi rufo-fulvous.

Hab. Eaglehawk Neck, S.-E. Tasmania, February 12th-March 3rd, 1913 (R. E. Turner). Two females. British Museum. Allied to *E. hamulata*, but distinguished by the entirely black face. It is perhaps not more than a local race of *hamulata*.

Exoneura angophoræ occidentalis, subsp. n.

♀. Length $6\frac{1}{2}$ -7 mm.; face wholly without light markings; face narrowed below; scape red or yellowish-red in front; wings reddish; anterior and middle femora above, and below apically, and their tibiae and tarsi entirely, bright ferruginous; hind legs black, the femora and tibiae narrowly red at apex; hind tibiae and tarsi with much fuscous hair; basal segment of abdomen black except the apical margin, the hind border of the black obtusely bilobed; second segment with a broad biundulate dusky band.

Hab. Yallingup, S.-W. Australia, September 14th-October 31st, 1913 (R. E. Turner). Four females. British Museum. Mr. Meade-Waldo notes:—"Not *E. bicolor*; differs in colour of hind legs, &c." It is, however, so close to *E. angophoræ* that I treat it as a subspecies.

Exoneura insularis, sp. n.

♀. Length about 6 mm.; black, including the abdomen; orbits moderately converging below; clypeal and lateral marks cream-colour; clypeus with a very broad median band, which suddenly broadens above, so as to include all of upper part of clypeus; lateral marks rather small, subtriangular; scape with a red mark near base, and one at apex; flagellum thick, very obscure reddish beneath; tubercles black, with white hair; pleura and sides of metathorax with thin white hair; tegulae piceous; wings reddish, nervures and the large stigma dull ferruginous; legs black, anterior tibiae obscure reddish at base and subapically; hair of hind tibiae and tarsi black; abdomen very broad.

Hab. Stradbroke Island, Queensland, September 24th, 1906 (W. W. Froggatt, 155). Allied to *E. botanica*, but easily separated by the lateral face-marks and dark tubercles.

Allodape bribiensis, sp. n.

♀. Length about 4 mm.; black, the abdomen dullish, not shining as in *A. unicolor*; eyes greyish-green; clypeus with a broad white vertical bar, narrowest at top, and gradually widening downwards; scape black; flagellum ferruginous beneath, except at base; mesothorax shining; tegulae testaceous; wings moderately dusky; nervures and stigma dusky reddish; tubercles white; anterior femora with two white spots at apex, their tibiae brown with a white line on outer side; middle tibiae with a white spot at base;

posterior tibiæ with more than the basal half broadly white posteriorly; hind margins of abdominal segments more or less reddish, but very narrowly and obscurely.

Hab. Bribie Island, Queensland, November 2nd, 1913 (H. Hacker; Queensland Museum, 112). Nearest to *A. unicolor*, but smaller, with different clypeal mark, and white marks on the legs.

NEW SPECIES OF GEOMETRIDÆ FROM FORMOSA.

By A. E. WILEMAN, F.E.S.

Bapta conspersa, sp. n.

♂. Head white, face brown; antennæ brown, white at base; thorax and abdomen white, the latter speckled with grey. Fore wings obtusely pointed at apex, white speckled with grey, costa narrowly ochreous; discoidal dot black; antemedial and postmedial lines grey, the former slender and only distinct towards dorsum, the latter diffuse, curved and recurved. Hind wings white speckled with grey; discoidal dot minute, black; postmedial line grey, narrower than that on fore wings. Fringes and under side of all the wings, white.

Expanse, ♂, 33 millim.; ♀, 35 millim.

Collection number, 778.

One example of each sex. The male from Daitozan (8500 ft.), September 17th, 1906, and the female from Arizan, August 21st, 1908.

Bapta marginata, sp. n.

♂. Head white, face brown; antennæ brown, white at base; thorax and abdomen white powdered with grey. Fore wings white, thickly powdered with grey on the basal area, which is limited by the slightly darker and almost straight antemedial line; postmedial band grey, fairly parallel with termen; a broad grey band on terminal area; discoidal dot black. Hind wings white, basal two-thirds finely powdered with grey; terminal third grey, traversed by a narrow band of ground colour; discoidal dot black. Fringes and also the under side of all the wings, white.

Expanse, 36 millim.

Collection number, 778b.

A male specimen from Arizan (7300 ft.), August 22nd, 1908.

Pseudomicronia fasciata, sp. n.

♂. Head, thorax, and abdomen white, the latter faintly brownish-tinged. Fore wings white with nine slightly oblique fuscous grey transverse lines, the third and fourth bifurcate towards the costa, the fifth and sixth approximate on dorsum and diverge towards costa, where they enclose a fuscous grey transverse streak; all the lines are blackish on the costa and have short blackish linear marks between them; a fuscous grey band just beyond the fourth line; terminal